

Claims

1. Process for digital message transmission in the packet mode, in which process the transmitted signals are sampled at the end of a transmission link by means of a device for timing recovery and are then further processed, and in which process the signals are fed to a discriminator simultaneously via two separate paths, a delay path and a path fitted with a filter, wherein

- a wideband bandpass filter with a relative bandwidth of 0.2 % to 0.4 % of the bit timing of the transmitted signals is used as a filter, whose transient recovery time is less than the time by which the signals are delayed on the delay path, which in turn is less than the decay time of the bandpass filter, and

- an amplifier limiting the amplitude of the output voltage of the same limiting amplifier via which the timing signals are brought to the required constant level, is connected downstream of the bandpass filter.

2. Process according to Claim 1, wherein a bandpass filter with a relative bandwidth of 0.3 % of the bit timing of the transmitted signals is used.

3. Process according to Claim 1, wherein

- a circuit with two parallel paths in which each is an identical low-pass filter arranged between two analogue multipliers, is used as the bandpass filter, and

- the local timing is applied to the multipliers of the one path, while the local timing shifted by 90° is applied to the multipliers of the other path.

4. Process according to Claim 3, wherein a sample-and-hold element is inserted in each case in the direction of transmission prior to the low-pass filters.

5. Process according to Claim 1, wherein the coding of

the signals prior to the bandpass filter is converted from an NRZ code to an RZ code.

6. Receiver for an optical telecommunications system for the transmission of optical data packets, wherein

- a wideband bandpass filter with a relative bandwidth of 0.2 % to 0.4 % of the bit timing of the transmitted signals is used as a filter, whose transient recovery time is less than the time by which the signals are delayed on the delay path, which in turn is less than the decay time of the bandpass filter, and

- wherein an amplifier limiting the amplitude of the output voltage of the same limiting amplifier via which the timing signals are brought to the required constant level, is connected to the bandpass filter.